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- **Watanabe, Yuka**
Tokyo, Tokyo 105-8001 (JP)
- **Hamamura, Tomoyuki**
Tokyo, Tokyo 105-8001 (JP)
- **Irie, Bunpei**
Tokyo, Tokyo 105-8001 (JP)
- **Sawada, Akira**
Tokyo, Tokyo 105-8001 (JP)
- **Baba, Kenji**
Tokyo, Tokyo 105-8001 (JP)

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(71) Applicant: **Kabushiki Kaisha Toshiba**
Minato-ku,
Tokyo 105-8001 (JP)

(72) Inventors:
• **Maeda, Masaya**
Tokyo, Tokyo 105-8001 (JP)

(74) Representative: **Horn Kleimann Waitzhofer**
Ganghoferstrasse 29a
80339 München (DE)

(54) **Sorting system**

(57) A sorting system is provided with conveying section, distance detecting section, article detecting section, determining section, acquisition section, and sorting section. The conveying section conveys an article. The distance detecting section acquires distance data indicating a distance, from above the conveying section, from the distance detecting section to an object included in a detection area including an area through which the article

conveyed by the conveying section passes. The article detecting section detects one or a plurality of the articles based on the distance data. The determining section determines, when a plurality of the articles are detected, whether a plurality of the articles are sortable. The acquisition section acquires sorting information of the article. The sorting section sorts the article based on sorting possibility determination and the sorting information.

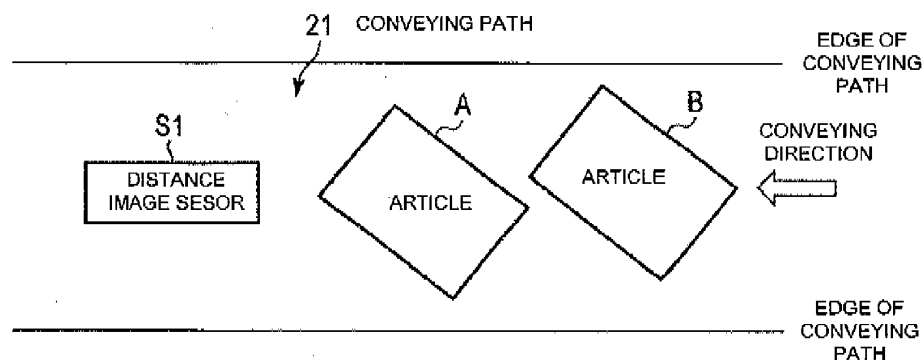


FIG. 4



PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 2 418 020 A2 (OPTISERVE B V [NL]) 15 February 2012 (2012-02-15) * paragraph [0023] - paragraph [0026]; figures * * paragraph [0080] * -----	11-15	INV. B07C5/00 B07C3/00
			TECHNICAL FIELDS SEARCHED (IPC)
			B07C
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
Munich		22 January 2015	Wich, Roland
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.02 (P04E07)

**INCOMPLETE SEARCH
SHEET C**

Application Number

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Claim(s) completely searchable:
11-15

Claim(s) not searched:
1-10

Reason for the limitation of the search:

The subject-matter of independent claims 1 and 11 has been found to relate to different subject-matter, which is not considered to fall under the exception mentioned in Rule 43(2)(c) EPC, as submitted by the applicant. In particular, every sorting process faces the technical problem formulated in the application in suit, namely to distinguish articles in order to allow correct separation. As formulated in the applicant's letter dated 24.10.2014, a search is carried out on the basis of claim 11 and claims dependent thereon (auxiliary request).

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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22-01-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 2418020 A2	15-02-2012	EP 2418020 A2	15-02-2012
		NL 2005216 C	20-02-2012
		US 2012037545 A1	16-02-2012

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82